

## AMENDMENTS TO THE CLAIMS

What is claimed is:

1. (Original) A system comprising:

a database;

a message server having no persistent state; and

a plurality of instances of an application server implementing a Java application model coupled in a star topology with the message server at a center of the star topology, the plurality of instances sharing the database.

2. (Original) The system of claim 1 wherein each instance comprises:

a dispatcher node; and

a plurality of server nodes.

3. (Original) The system of claim 2 wherein each server node comprises:

a java 2 enterprise edition (J2EE) engine.

4. (Original) The system of claim 1 further comprising:

a central lock server to provide cluster wide locks to the plurality of instances.

5. (Original) The system of claim 1 wherein the message server comprises:

a first data structure to store a list of connected clients; and  
a second data structure and a list of services provided in the system.

6. (Currently Amended) A computer readable storage media containing executable computer program instructions which when executed cause a digital processing system to perform a method comprising:

starting a central services node to provide a locking service and a messaging service, the messaging service having no persistent state;

starting a plurality of application server instances; and

organizing the application server instances into a cluster having star topology with the central services node at a center of the star topology.

7. (Original) The computer readable storage media of claim 6 containing executable computer program instructions which when executed cause a digital processing system to perform the method further comprising:

sharing a database among the plurality of application server instances.

8. (Original) The computer readable storage media of 6 containing executable computer program instructions which when executed cause a digital processing system to perform the method wherein starting a plurality of application server instances comprises:

starting, for each application server instance of the plurality, a dispatcher node and a plurality of server nodes.

9. (Original) The computer readable storage media of claim 6 containing executable computer program instructions which when executed cause a digital processing system to perform the method further comprising:

starting a message server having no persistent state.

10. (Original) The computer readable storage media of claim 6 containing executable computer program instructions which when executed cause a digital processing system to perform the method further comprising:

registering each application server with the messaging server.

11. (Original) The computer readable storage media of claim 6 containing executable computer program instructions which when executed cause a digital processing system to perform the method further comprising:

conducting inter instance communication through the messaging service.

12. (Original) The computer readable storage media of claim 9 containing executable computer program instructions which when executed cause a digital processing system to perform the method further comprising:

restarting the message server without state recovery responsive to a system failure.

13. (Original) The computer readable storage media of claim 10 containing executable computer

program instructions which when executed cause a digital processing system to perform the method further comprising:

notifying all registered instances from the message server when an additional instance joins the cluster.

14. (Previously Presented) A system comprising:

means for organizing a plurality of application servers instances into a cluster having a star topology with a central services node at a center of the star topology;

means for sharing a storage resource across the cluster; and

means for performing centralized inter instances communication without maintenance of persistent state information.

15. (Original) The system of claim 14 further comprising:

means for centralized locking of a resource within the cluster.

16. (Original) The system of claim 14 wherein the means for performing comprises:

a message server having no persistent state.

17. (Original) The system of claim 14 wherein the means for performing comprises:

means for registering instances; and means for recording services provided in the cluster.

18. (Currently Amended) A method comprising:

starting a central services node to provide a locking service and a messaging service, the messaging service not maintaining a persistent state;

starting a plurality of application server instances; and

organizing the application server instances into a cluster having star topology with the central services node at a center of the star topology.

19. (Original) The method of claim 18 further comprising:

sharing a database among the plurality of application server instances.

20. (Original) The method of claim 18 wherein starting a plurality of application server instances comprises:

starting, for each instance of the plurality, a dispatcher node and a plurality of server nodes.

21. (Original) The method of claim 18 wherein starting a central service node comprises:

starting a message server having no persistent state.

22. (Original) The method of claim 18 wherein organizing comprises:

registering each application server with the messaging server.

23. (Original) The method of claim 18 further comprising:

conducting inter instance communication through the messaging service.

24. (Original) The method of claim 21 further comprising:

restarting the message server without state recovery responsive to a system failure.

25. (Original) The method of claim 22 wherein organizing further comprises:

notifying all registered instances from the message server when an additional instance joins the cluster.